

CLAIMS

What is claimed is:

- 5 1. A method for transmitting data utilizing a plurality of communication applications simultaneously in a communication device supporting the plurality of communication applications, the method comprising:
- a) establishing a first communication session between a user of the communication device and a recipient via a first communication application supported by the communication
- 10 device;
- b) invoking a second communication application in response to user input to transmit data to the recipient via the second communication application during a communication session concurrent with the first communication session; and
- c) in response to invoking the second communication application, automatically
- 15 retrieving communication information related to the recipient and necessary to establish the concurrent communication session via the second communication application.
2. The method of claim 1 further comprising:
- d) transmitting data to the recipient via the second communication application while
- 20 the first communication session continues uninterrupted.
3. The method of claim 1, wherein the retrieving step (c) further includes:
- c1) determining whether the first communication session is ongoing;
- c2) returning communication information used to establish the first ongoing

session; and

c3) utilizing the returned communication information to retrieve the related communication information.

5 4. The method of claim 1, wherein the retrieving step (c) further includes:

c1) retrieving the related communication information from a profile corresponding to the recipient, wherein the profile includes communication information necessary to establish a connection with the recipient via any of the plurality of supported communication applications.

10 5. The method of claim 4, wherein the profile is stored in a database in memory in the communication device.

6. The method of claim 4, wherein the profile is stored in a database in a remote
15 server accessible by the communication device.

7. The method of claim 4, wherein the retrieving step (c1) further includes:

c1i) submitting a query to retrieve the related communication information, wherein the query includes, as an input parameter, communication
20 information used to establish the first communication session via the first communication application;

c1ii) identifying the profile corresponding to the recipient using the input parameter; and

c1iii) selecting, from the identified profile, the appropriate communication information necessary to support a connection via the second communication application.

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8. The method of claim 4 further including:

d) after establishing the first communication session in step (a), receiving a profile corresponding to the recipient from the recipient's communication device;

e) automatically updating an existing profile for the recipient, if one exists; and

f) storing the recipient's profile in memory.

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9. The method of claim 8 further comprising:

g) requesting the recipient's profile from the recipient's device prior to receiving step (d).

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10. The method of claim 8 further comprising:

g) transmitting a profile corresponding to the user to the recipient device.

11. The method of claim 2 further comprising:

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e) prior to transmitting step (d), returning the related communication information to the second communication application, wherein the second communication application uses the related communication information to establish the concurrent communication session.

12. The method of claim 1, wherein the invoking step (b) includes:

b1) initiating by the user the second communication application directly.

13. The method of claim 1, wherein the invoking step (b) includes:

b1) requesting by the user to transmit data;

b2) selecting by the user data to be transmitted; and

b3) automatically invoking the second communication application suitable for transmitting the data selected by the user.

14. The method of claim 1, wherein the communication information includes one or more phone numbers, one or more email addresses and dynamically assigned IP addresses.

15. A computer readable medium containing program instructions for transmitting data utilizing a plurality of communication applications simultaneously in a communication device supporting the plurality of communication applications, the program instructions for:

a) establishing a first communication session between a user of the communication device and a recipient via a first communication application supported by the communication device;

b) invoking a second communication application in response to user input to transmit data to the recipient via the second communication application during a communication session concurrent with the first communication session; and

c) in response to invoking the second communication application, automatically retrieving communication information related to the recipient and necessary to establish the concurrent communication session via the second communication application.

16. The computer readable medium of claim 15 further including:

d) transmitting data to the recipient via the second communication application while the first communication session continues uninterrupted.

5 17. The computer readable medium of claim 15 wherein the retrieving instruction (c) further includes:

c1) determining whether the first communication session is ongoing;

c2) returning communication information used to establish the first ongoing session; and

10 c3) utilizing the returned communication information to retrieve the related communication information.

18. The computer readable medium of claim 15, wherein the retrieving instruction (c) further includes:

15 c1) retrieving the related communication information from a profile corresponding to the recipient, wherein the profile includes communication information necessary to establish a connection with the recipient via any of the plurality of supported communication applications.

20 19. The computer readable medium of claim 18, wherein the profile is stored in a database in memory in the communication device.

20. The computer readable medium of claim 18, wherein the profile is stored in a

database in a remote server accessible by the communication device.

21. The computer readable medium of claim 18, wherein the retrieving instruction (c1) further includes:

5 c1i) submitting a query to retrieve the related communication information, wherein the query includes, as an input parameter, communication information used to establish the first communication session via the first communication application;

10 c1ii) identifying the profile corresponding to the recipient using the input parameter; and

 c1iii) selecting, from the identified profile, the appropriate communication information necessary to support a connection via the second communication application.

15 22. The computer readable medium of claim 18 further including:

 d) after establishing the first communication session in step (a), receiving a profile corresponding to the recipient from the recipient's communication device;

 e) automatically updating an existing profile for the recipient, if one exists; and

 f) storing the recipient's profile in memory.

20 23. The computer readable medium of claim 22 further comprising:

 g) requesting the recipient's profile from the recipient's device prior to receiving step (d).

24. The computer readable medium of claim 22 further comprising:

g) transmitting a profile corresponding to the user to the recipient device.

25. The computer readable medium of claim 16 further comprising:

e) prior to transmitting instruction (d), returning the related communication

information to the second communication application, wherein the second communication application uses the related communication information to establish the concurrent communication session.

26. The computer readable medium of claim 15, wherein the invoking instruction (b)

includes:

b1) initiating by the user the second communication application directly.

27. The computer readable medium of claim 15, wherein the invoking instruction (b)

includes:

b1) requesting by the user to transmit data;

b2) selecting by the user data to be transmitted; and

b3) automatically invoking the second communication application suitable for transmitting the data selected by the user.

28. The computer readable medium of claim 15, wherein communication information

includes phone numbers, email addresses and dynamically assigned IP addresses.

29. A communication device supporting a plurality of communication applications comprising:

means for allowing a user to establish a first communication session with a recipient via a first communication application supported by the communication device;

5 means for invoking a second communication application to transmit data to the recipient via the second communication application during a communication session concurrent with the first communication session; and

an integration module, responsive to the means for invoking, for automatically retrieving communication information related to the recipient and necessary to establish the concurrent
10 communication session via the second communication application.

30. The device of claim 29 further comprising means for transmitting data to the recipient via the second communication application while the first communication session continues uninterrupted.

15 31. The device of claim 29, wherein the integration module includes a communication monitor for receiving a query from the second communication application to determine whether the first communication session is ongoing and for returning communication information used to establish the first ongoing session.

20 32. The device of claim 31, wherein the integration module further includes an address mapper for receiving a query from the second communication application to retrieve the related communication information from a profile corresponding to the recipient, wherein the

profile includes communication information necessary to establish a connection with the recipient via any of the plurality of supported communication applications.

33. The device of claim 32, wherein the query includes, as an input parameter, the communication information used to establish the first communication session via the first communication application, and wherein the address mapper identifies the profile corresponding to the recipient using the input parameter and selects, from the identified profile, the appropriate communication information need to support a connection via the second communication application.

34. The device of claim 32, wherein the address mapper further includes means for receiving a profile corresponding to the recipient from the recipient's communication device, means for updating an existing profile for the recipient, if one exists, and means for storing the recipient's profile in memory.

35. The device of claim 34, wherein the address mapper is in communication with a remote server.

36. The device of claim 35, wherein the remote server includes memory for storing the recipient's profile and means for retrieving related communication information in response to receiving the query from the address mapper.

37. The device of claim 35, wherein the address mapper is in communication with the

remote server via a gateway.

38. A method for exchanging data utilizing a plurality of communication applications simultaneously in at least two communication devices, wherein each of the at least two communication devices supports the plurality of communication applications, the method comprising:

a) establishing a first communication session between a first party using a first communication device and a second party using a second communication device via a first communication application supported by the first communication device;

b) invoking a second communication application in either the first or second communication device by a sending party to transmit data to a receiving party via the second communication application during a communication session concurrent with the first communication session, wherein the sending party is either the first party or the second party and the receiving party is a counterpart of the sending party;

c) in response to invoking the second communication application by the sending party, automatically retrieving communication information related to the receiving party and necessary to establish the concurrent communication session via the second communication application; and

d) transmitting data to the receiving party via the second communication application while the first communication session continues uninterrupted.